EPA NEW ENGLAND

REGIONAL LABORATORY

ENVIRONMENTAL SCIENCE FACT SHEET

The Natural Landscaping at EPA's Laboratory

NATURAL LANDSCAPING AT EPA'S LABORATORY

A GREEN APPROACH TO LANDSCAPING

The EPA New England Regional Laboratory landscaping design and maintenance program follows water conservation and environmental protection principles. **The Laboratory's landscaping is a natural system with mostly native grasses, wild flowers, and shrubs.** The landscaping is adapted to the local climate, with little additional water, minimal cutting, and no synthetic fertilizer or pesticides.

The lawn area at the Regional Lab is allowed to grow tall, and, to an untrained eye, may look untended. However, it is managed to mimic a meadow and its natural growing conditions. Once a year, it is cut after many of the grasses and wildflowers have gone to seed. The cut vegetation is left in place to create a thatch layer which releases seeds and stored nutrients back to the soil. The tall grass and wildflowers with deep roots protect the soil from erosion, sustain the lawn during droughts, and create a biologically diverse habitat for insects, birds, and mammals.

The Laboratory's landscaping is a beautiful natural ecosystem utilizing mostly native plants.

While the Northeast is endowed with an abundance of fresh water, people and their lawns place increasing demands on available supplies. For example, an estimated 30 percent of water used along the East Coast was for watering lawns. Because of the Regional Lab's commitment to natural landscaping and water conservation, watering is a rare event.

Red-tailed Hawk

The native shrubs used in the landscaping are well adapted to the local climate and support biodiversity by providing food for native insects, birds, and other animals. The native shrubs include: bayberry, bearberry, highbush blueberry, highbush cranberry, red-osier dogwood, juneberry, sweet fern, and winterberry. It is not uncommon to see a red-tailed hawk soaring above the Lab's grounds looking for meadow voles or field mice; a kestrel perched on a fence; flocks of birds feeding on grass seed and insects; a stealthy fox or coyote hunting; a preening wild turkey; or to hear spring peepers calling from the wetlands. When visiting the EPA Lab, look for the many species that have made our grounds their home!

Wild Lupine

continued

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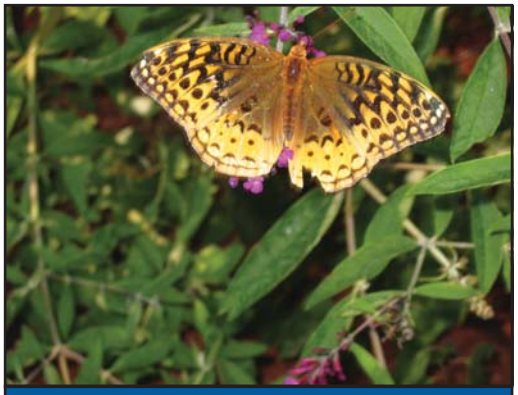
Conventional Lawns

In contrast to EPA's natural lawn, a typical conventional lawn has little diversity of species, resembling a green carpet. A conventional lawn can require heavy watering, fertilizing, toxic herbicides, pesticides and petrochemicals to maintain it. This can lead to a range of negative environmental and human health impacts.



Great Spangled Fritillary

Purple Cone Flower and Partridge Pea

• Annually, lawn care is a $30 billion industry in America. One acre of lawn costs an estimated $400-700 each year to maintain — more per acre than to raise corn, rice, or sugarcane.

• An estimated 70 million pounds of pesticides are applied on lawns each year—ten times more per acre than are applied to agricultural crops. In 1997, sales of lawn care pesticides in the U.S. accounted for one third of total world expenditure on pesticides.

• Some 40-60% of the nitrogen fertilizer applied to lawns end up in surface and groundwater, contaminating these waters with excess nutrients. These excess nutrients lead to algal blooms, low dissolved oxygen, and impaired ecological health in our rivers, lakes, ponds, and coastal waters.

• Conventional lawns contribute to rapid runoff of rainfall compared to natural habitats, causing flooding and erosion. A conventional lawn needs about 1" of water every 7-10 days to stay green.

• Gas-powered lawn equipment produces as much as one-tenth of the smog-forming pollutants from all mobile sources. The average gas mower produces as much air pollution in one year as 43 new cars driving 12,000 miles each. Lawn mowers use 800 million gallons of gas per year.

• The total area of lawn in America is about 28 million acres (an area the size of Pennsylvania) with three-quarters or 21 million acres in home lawns (with the average size of one third of an acre).

• The average homeowner spends 25 hours per year mowing their lawn.

What can you do at home?

To create your own natural landscaping, slowly transition your own yard to a more natural and environmentally friendly landscape. Plant some native grasses and wildflowers in part of your lawn and let this area grow tall. Minimize and eliminate lawn chemicals, use compost or natural organic based fertilizers. Leave your grass clippings on the lawn to naturally fertilize and help retain moisture. Avoid watering and let your lawn go dormant (brown) during dry periods. Visit your local garden center and request information on natural lawn care, organic fertilizers, non-toxic pesticides, and native plants.

For additional information and references visit this web page:

http://www.epa.gov/ne/lab/greenbuilding/landscaping.html

Produced by the EPA New England Regional Laboratory Green Committee

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